

MAY 11 1999

ATTY. DOCKET NO.  
1758-4036US2SERIAL NO.  
09/120,044

FORM PTO-1449

U.S. DEPARTMENT OF COMMERCE  
PATENT AND TRADEMARK OFFICE

## INFORMATION DISCLOSURE CITATION

(Use several sheets if necessary)

APPLICANT

Conceicao Minetti, et al.

FILING DATE  
July 21, 1998GROUP ART UNIT  
1643 164

## U.S. PATENT DOCUMENTS

EXAMINER INITIAL		DOCUMENT NUMBER	DATE	NAME	CLASS	SUBCLASS	FILING DATE IF APPROPRIATE

## FOREIGN PATENT DOCUMENTS

		DOCUMENT NUMBER	DATE	COUNTRY	CLASS	SUBCLASS	TRANSLATION	
							YES	NO
SD	A	WO 96/05859	02/29/96	PCT				
SD	A	WO 95/16711	06/22/95	PCT				

## OTHER DOCUMENTS (Including Author, Title, Date, Pertinent Papers, Etc.)

SD	A		F. Michon, et al., Multivalent pneumococcal capsular polysaccharide conjugate vaccines employing genetically detoxified pneumolysin as a carrier protein, <u>Vaccine</u> , Volume 16, No. 18, November 1998, pp. 1732-1741.				

EXAMINER

SD

DATE CONSIDERED

06 NOV. 99

EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609; Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

FORM PTO-1449

U.S. DEPARTMENT OF COMMERCE  
PATENT AND TRADEMARK OFFICE

## INFORMATION DISCLOSURE CITATION

(Use several sheets if necessary)

ATTY. DOCKET NO.  
1758-4036US2FEB 03 1999  
S E R I A L N O .  
09120,044

APPLICANT

Conceicao Mineiro

FILING DATE  
July 21, 1998GROUP ART UNIT  
1643

1641

## U.S. PATENT DOCUMENTS

EXAMINER INITIAL		DOCUMENT NUMBER	DATE	NAME	CLASS	SUBCLASS	FILING DATE IF APPROPRIATE
SD	A	5, 623, 057	04/22/97	Marburg, Stephen, et al.	530	404	05/20/94
SD	A	5, 565, 204	10/15/96	Kuo, Joseph S. C., et al.	424	244.1	08/24/94

## FOREIGN PATENT DOCUMENTS

		DOCUMENT NUMBER	DATE	COUNTRY	CLASS	SUBCLASS	TRANSLATION	
							YES	NO
SD		WO 90/06951 ✓	06/28/99	PCT				
SD		0 687 688 A1 ✓	12/20/95	European				

## OTHER DOCUMENTS (Including Author, Title, Date, Pertinent Papers, Etc.)

SD	A	Peter J. Morgan, et al., Structural and functional characterisation of two proteolytic fragments of the bacterial protein toxin, pneumolysin, <u>FEBS Letters</u> , Volume 412, No. 3, August 4, 1997, pp. 563-567.
SD	A	Jamie Rossjohn, et al., Structure of a Cholesterol-Binding, Thiol-Activated Cytolysin and a Model of Its Membrane Form, <u>Cell</u> , Volume 89, May 30, 1997, pp.685-692.
SD	A	Robert A. Lock, et al., Sequence variation in the <i>Streptococcus pneumoniae</i> pneumolysin gene affecting haemolytic activity and electrophoretic mobility of the toxin, <u>Microbial Pathogenesis</u> , Volume 21, 1996, pp. 71-83.

## EXAMINER

SD

## DATE CONSIDERED

08 NOV 99

EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609; Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

FORM PTO-1449	U.S. DEPARTMENT OF COMMERCE PATENT AND TRADEMARK OFFICE		ATTY. DOCKET NO. 1758-4036US2	FEB 03 1999	SERIAL NO. 09/120,044
INFORMATION DISCLOSURE CITATION  (Use several sheets if necessary)			APPLICANT Conceicao Minetti, et al.	PATENT TRADEMARK OFFICE AS	
			FILING DATE July 21, 1998	GROUP ART UNIT 1643 1641	

## U.S. PATENT DOCUMENTS

EXAMINER INITIAL		DOCUMENT NUMBER	DATE	NAME	CLASS	SUBCLASS	FILING DATE IF APPROPRIATE

## FOREIGN PATENT DOCUMENTS

		DOCUMENT NUMBER	DATE	COUNTRY	CLASS	SUBCLASS	TRANSLATION	
							YES	NO

## OTHER DOCUMENTS (Including Author, Title, Date, Pertinent Papers, Etc.)

SP	A	Joseph Kuo, et al., Characterization of a Recombinant Pneumolysin and Its Use as a Protein Carrier for Pneumococcal Type 18C Conjugate Vaccines, <u>Infection and Immunity</u> , Volume 63, No. 7, July 1995, pp. 2706-2713.
		Jay C. Butler, et al., Serotype Distribution of <i>Streptococcus pneumoniae</i> Infections among preschool Children in the United States, 1978-1994: Implications for development of a Conjugate Vaccine, <u>The Journal of Infectious Diseases</u> , Volume 171, No. 4, April 1995, pp.885-889.
SP	A	Janet E. Alexander, et al., Immunization of Mice with Pneumolysin Toxoid Confers a Significant Degree of Protection against At Least Nine Serotypes of <i>Streptococcus pneumoniae</i> , <u>Infection and Immunity</u> , Volume 62, No. 12, December 1994, pp. 5683-5688.
SP	A	

EXAMINER	DATE CONSIDERED
SP	08 Nov. 99

EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609; Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

FORM PTO-1449	U.S. DEPARTMENT OF COMMERCE PATENT AND TRADEMARK OFFICE		ATTY. DOCKET NO. 1758-4036US2	SERIAL NO. 09/120,044
INFORMATION DISCLOSURE CITATION		APPLICANT Conceicao Menatti, et al.	FEB 03 1999 U.S. PATENT & TRADEMARK OFFICE	
(Use several sheets if necessary)		FILING DATE July 21, 1998	GROUP ART UNIT 1643 - 1641	

**U.S. PATENT DOCUMENTS**

EXAMINER INITIAL		DOCUMENT NUMBER	DATE	NAME	CLASS	SUBCLASS	FILING DATE IF APPROPRIATE

**FOREIGN PATENT DOCUMENTS**

		DOCUMENT NUMBER	DATE	COUNTRY	CLASS	SUBCLASS	TRANSLATION	
							YES	NO

**OTHER DOCUMENTS (Including Author, Title, Date, Pertinent Papers, Etc.)**

SD	A	Jim Hill, et al., Amino Acids in Pneumolysin Important for Hemolytic Activity Identified by Random Mutagenesis, <i>Infection and Immunity</i> , Volume 62, No. 2, February 1994, pp. 757-758.		
		Gianfranco Menestrina, et al., Structural features of the pore formed by <i>Staphylococcus aureus</i> $\alpha$ -toxin inferred from chemical modification and primary structure analysis, <i>FEMS Microbiology Immunology, Infection: Host Response and Immunity</i> , Volume 105, Nos. 1-3, September 1992, pp. 19-28.		
SD	A	James C. Paton, et al., Purification and Immunogenicity of Genetically Obtained Pneumolysin Toxoids and Their Conjugation to <i>Streptococcus pneumoniae</i> Type 19F Polysaccharide, <i>Infection and Immunity</i> , Volume 59, No. 7, July 1991, pp.2297-2304.		

EXAMINER	SD	DATE CONSIDERED	08 Nov. 99
----------	----	-----------------	------------

EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609; Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

FORM PTO-1449

U.S. DEPARTMENT OF COMMERCE  
PATENT AND TRADEMARK OFFICE

## INFORMATION DISCLOSURE CITATION

(Use several sheets if necessary)

ATTY. DOCKET NO.  
1758-4036US2SERIAL NO.  
09/120,044

APPLICANT

Conceicao Minetti, et al.

FILING DATE  
July 21, 1998GROUP ART UNIT  
1643 1641

## U.S. PATENT DOCUMENTS

EXAMINER INITIAL	DOCUMENT NUMBER	DATE	NAME	CLASS	SUBCLASS	FILING DATE IF APPROPRIATE

## FOREIGN PATENT DOCUMENTS

	DOCUMENT NUMBER	DATE	COUNTRY	CLASS	SUBCLASS	TRANSLATION	
						YES	NO

## OTHER DOCUMENTS (Including Author, Title, Date, Pertinent Papers, Etc.)

47	A	Margaret J. Green, et al., Site-Directed Mutagenesis of the Hole-Forming Toxin Aerolysin: Studies on the Roles of Histidines in Receptor Binding and Oligomerization of the Monomer, Biochemistry, Volume 29, No. 8, February 27, 1990, pp. 2177-2180.
57	A	Abstract W/PM-B4, A.S.A. Minetti, et al., Structural And Functional Characterization of Recombinant Streptococcal Pneumolysin, Biophysical J., Volume 74, No. 2, February 1998, p. A233.
	A	

EXAMINER

57

DATE CONSIDERED

08 Nov. 99

EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609; Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.